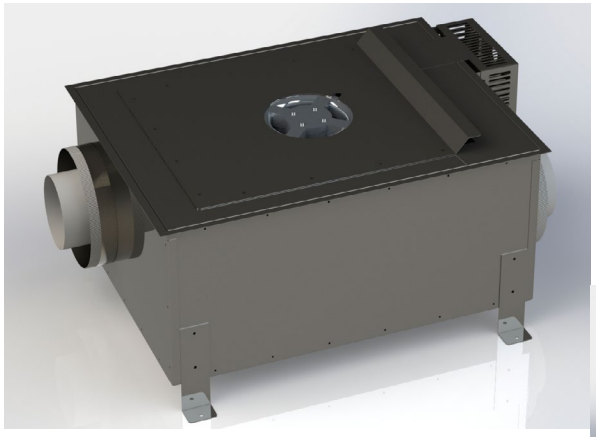
Installation & Maintenance Manual

MONTIGO®
the art of fireplaces



PVHIN58-300 with TMHIN58-40

5/8 Inline Power Vent with Flush Louvered Termination

⚠ WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

⚠ WARNING

Do not store or use gasoline or any other flammable vapors and liquids in the vicinity of this or any other appliance.

⚠ CAUTION

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

NOTICE

Installer: Leave this manual with the appliance.
Consumer: Retain this manual for future reference.

DANGER

IF YOU SMELL GAS

⚠ Do not try to light any appliance.
⚠ Do not touch any electrical switch; do not use any phone in your building.
⚠ Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
⚠ If you cannot reach your gas supplier, call the fire department.

NOTICE

This power vent is approved for use with Montigo fireplaces only and is certified to ANSI Z21.50 / CSA 2.22 vented gas fireplace standard along with the fireplace.

NOTICE

PVHIN58-300 and TMHIN58-40 are approved for use with Montigo R320, R320-ST, R420, R420-ST, and RP620.

NOTICE

You must read and understand this manual prior to installation, operation or troubleshooiting this applance. Please retain this owner's manual for future reference and maintenance.

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Safety Alert Key

⚠ DANGER

Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury or property damage.

⚠ WARNING

Indicates a hazardous situation which, if not avoided, COULD result in death or serious injury or property damage.

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, WILL result in minor or moderate injury.

NOTICE

Addresses practices that are important, but not related to personal injury

Introduction

Specifications

Pipe Dimensions PVHIN58-300 ..... 5"/8"

Pipe Dimensions TMHIN58-40 ..... 5"/8"

Maximum Airflow: ..... 300 CFM

Speed: ..... 2700 RPM

Power: ..... Connect to fireplace control box

..... Refer to fireplace rating plate

NOTICE

You must read and understand this manual prior to installation, operation or troubleshooiting this applance. Please retain this owner's manual for future reference and maintenance.

⚠ CAUTION

When cold air enters the warmer building interior, primarily at the air intake end, condensation may occur on the exterior of the pipe. To limit this condensation, install insulation over the last twenty feet of pipe. Also, by sloping the last 20' - 0' of pipe downward towards the exterior of the building will help eliminate any condensations problems, should they occur. Ensure the termination is securely fastened and sealed to the pipe. Fasten the termination to the exterior of the building with water tight sealant and the appropriate fasteners.

Before Your Begin

General Information

This installation guide covers installation of the External Power Vent System only. This system is designed to allow installation of gas fireplaces that cannot be done with a standard Direct Vent gas fireplace installation. Only for use on R-Series, R-Series See-Through and RP-Series that uses the 5/8 venting system.

ONLY USE WITH APPROVED FIREPLACES - see fireplace installation manual.

Read through the fireplace's installation & maintenance manual, as it must also be adhered to.

Power Cord Harnesses:

EPVH10 - 10 foot power cord and harness
EPVH20 - 20 foot power cord and harness
EPVH30 - 30 foot power cord and harness
EPVH40 - 40 foot power cord and harness
EPVH50 - 50 foot power cord and harness
EPVH60 - 60 foot power cord and harness
EPVH70 - 70 foot power cord and harness
EPVH80 - 80 foot power cord and harness
EPVH90 - 90 foot power cord and harness
EPVH100 -100 foot power cord and harness

For vent configurations and power vent locations, refer to fireplace manual.

Introduction

Product Dimensions

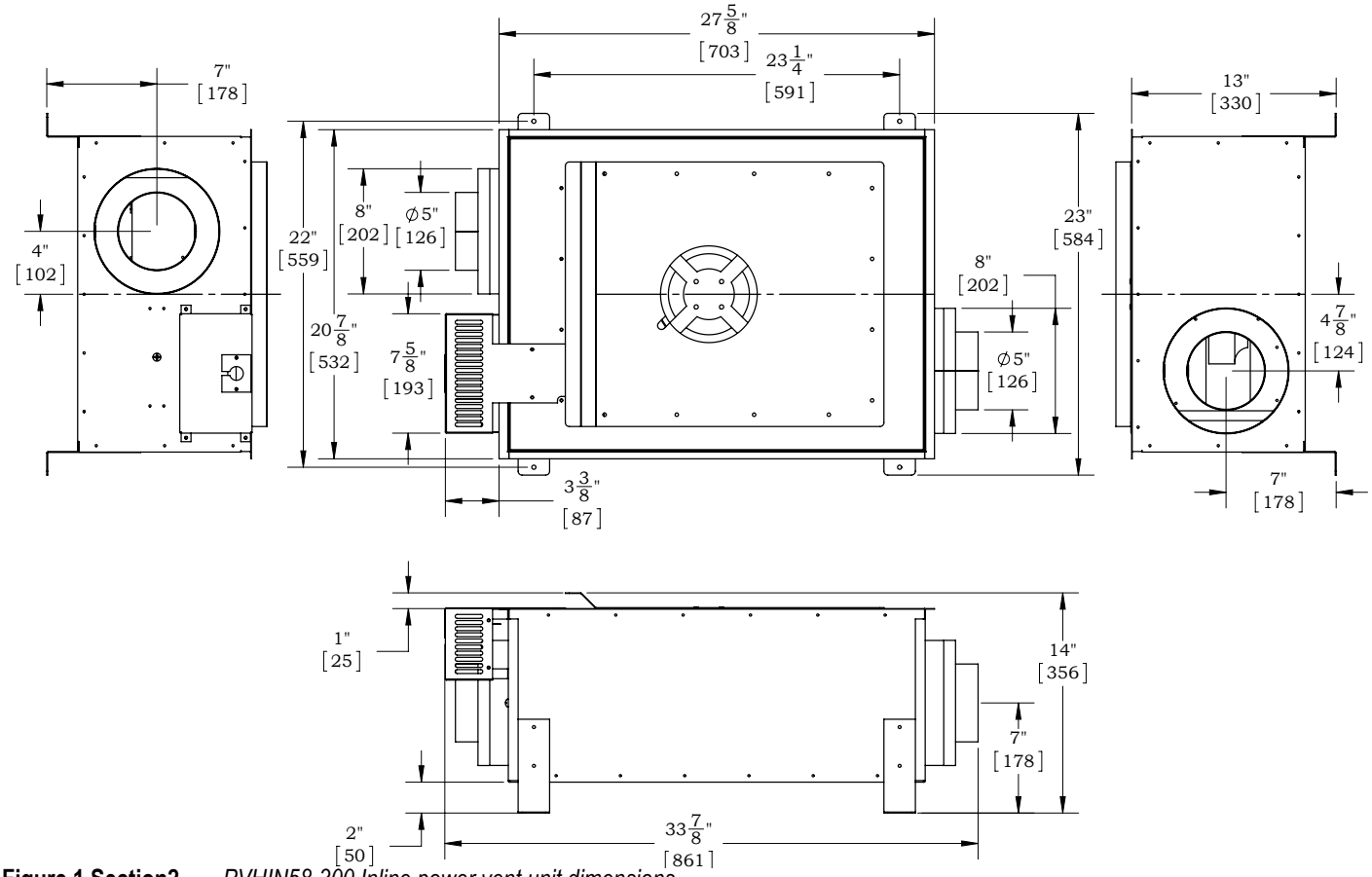


Figure 1 Section2. *PVHIN58-300 Inline power vent unit dimensions*

Introduction

Product Dimensions

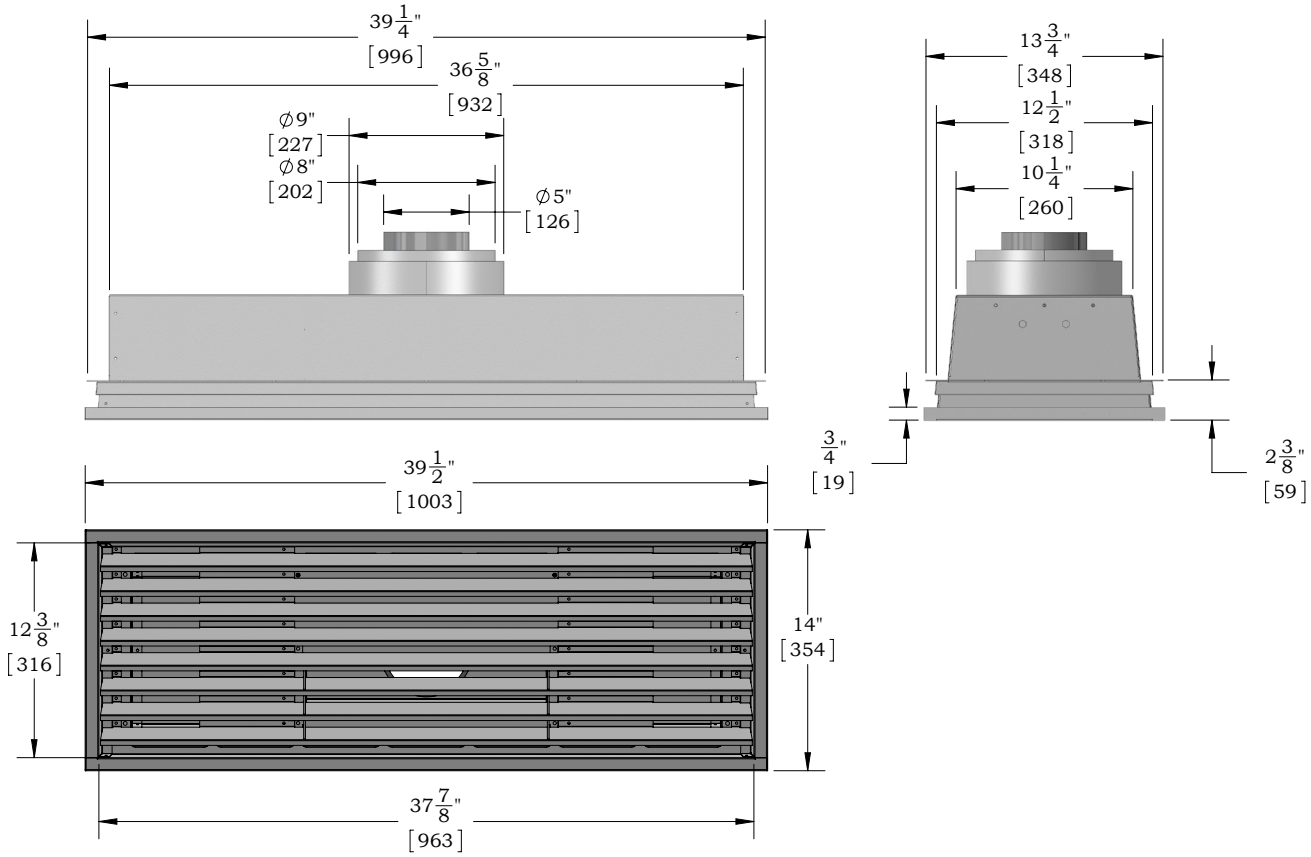


Figure 2 Section2. *TMHIN58-40 termination unit dimensions (without vanity ring)*

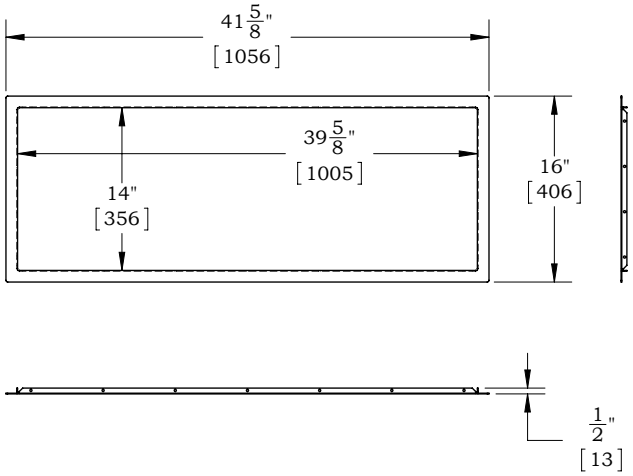


Figure 3 Section2. *Vanity ring dimensions.*

Installation

Installing the power vent

Power Vent Clearances

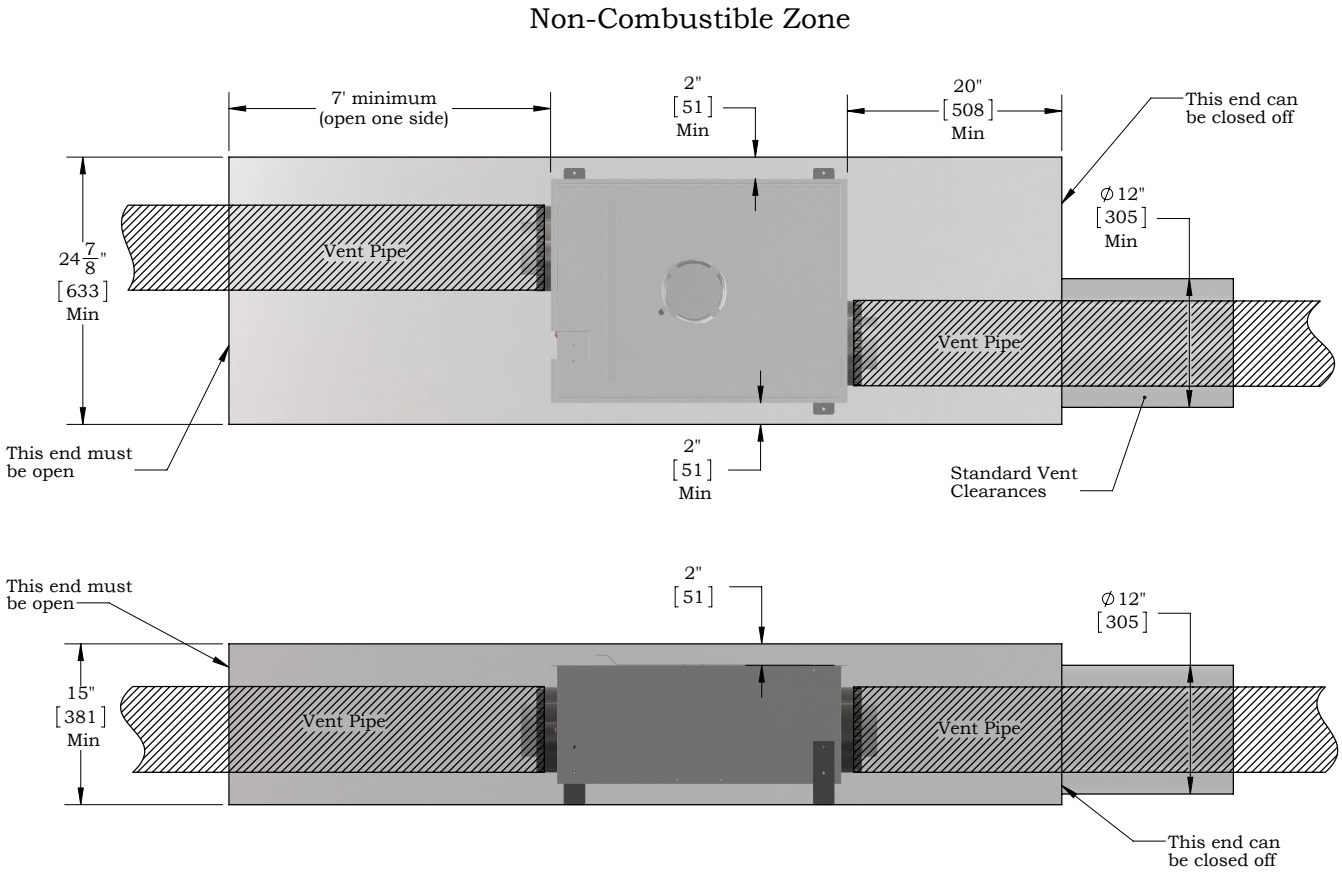


Figure 1. Section 3 PVHIN58-300 Clearances

Step 1. Unpack the power vent from supplied box.

Figure 2. Section 3

Step 2. Attach mounting feet by removing screws and tape.

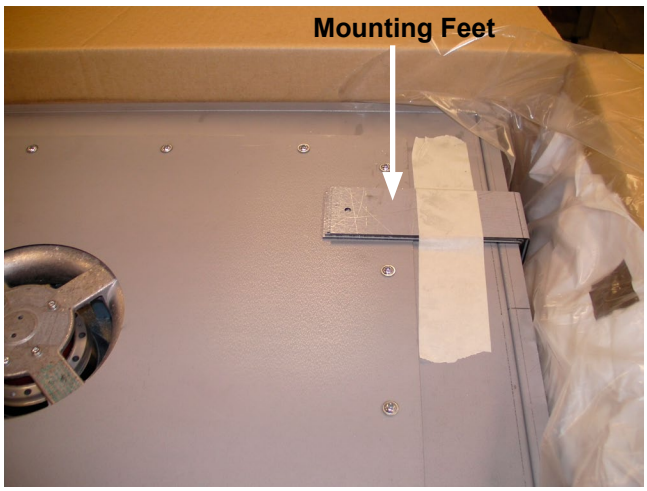


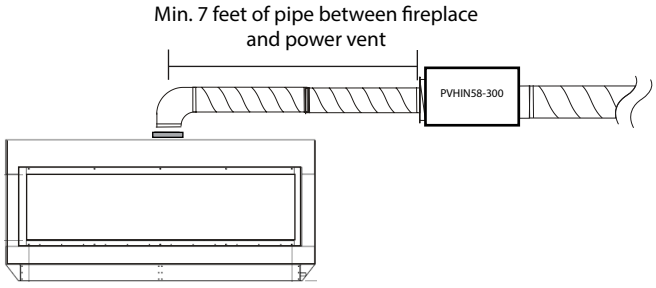
Figure 3. Section 3

Installation

Figure 4. Section 3

Figure 5. Section 3

Step 3. Power vent cannot be installed closer than 7 feet of venting to the appliance. This is the case whether vertical, horizontal or any combination.



Step 4. See Fireplace Manual for approved vent runs. Make sure you have the correct orientation of power vent. One end must face the fireplace and one end must face the termination.

Figure 6. Section 3

Figure 7. Section 3

Installation

Step 5. Remove two screws securing electrical plate.

Figure 8. Section 3

Step 6. Remove power vent cable from inside component cover.

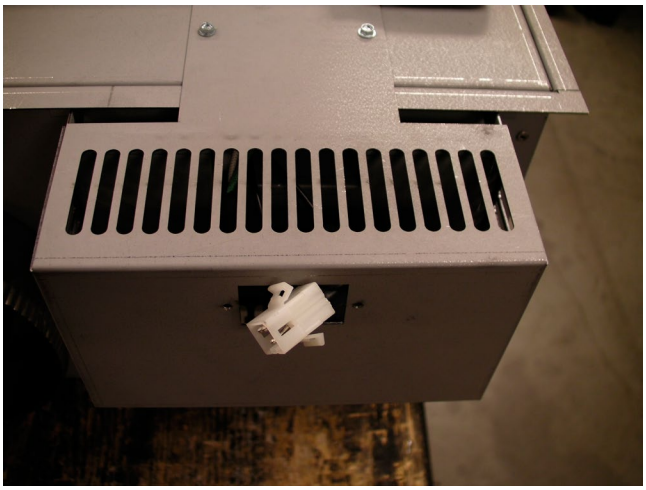


Figure 9. Section 3

Step 7. Take electrical harness [EPVH-10-100] that will communicate with the power vent, and attach the strain relief for it to the electrical plate. Tighten the nut on the strain relief.

Figure 10. Section 3

Figure 11. Section 3

Installation

Step 8. Attach the power cable from the power vent to the control cable.

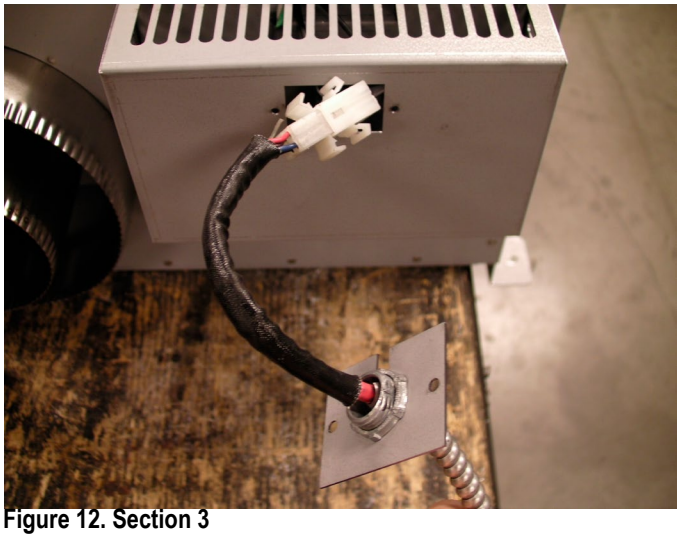


Figure 12. Section 3

Step 9. Push all excess cable back into the component cover. Screw electrical plate back on the power vent.

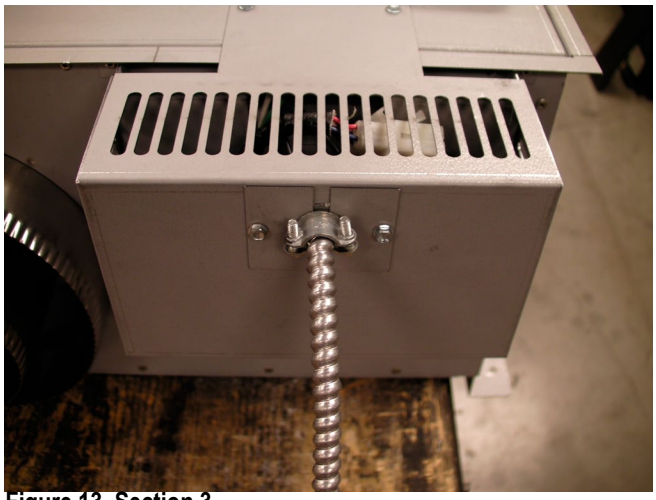


Figure 13. Section 3

Conduit and Wiring Clearances

Connect the power vent harness as outlined. Connect the wiring to the fireplace as outlined in the schematic showin in **Figure 14 Section 3**. Ensure that the proper clearances are maintained for the wiring and conduit. When installing the wiring, it must never run above the vent pipe and it must be at lest 1" clear of all venting and other hot surfaces.

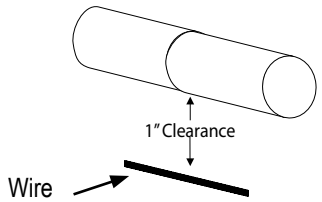


Figure 14. Section 3

Installation

How to use Diluter Collar

The PVHIN58-300 is equipped with a built-in diluter collar to allow air to bypass the fireplace. This results in slower air movement in the fireplace while still allowing for increased air flow through the power vent and termination, which keeps them cooler.The PVHIN58-300 is shipped with the diluter collar completely closed.

Note: When using the PVHIN58-300 with the RP620, you may not be able to open the diluter collar depending on the vent run. This is not such an issue, as the RP620 has its own bypass built into it which allows for a slower looking flame.

How to Open and Set the Diluter Collar

Step 1. Set power vent speed on the control box to full speed

Step 2. Open the diluter collar 100% by turning the diluter collar adjustment screw clockwise until the screw won't turn anymore.

As you turn the screw clockwise, the diluter collar plate will slide along the rails until it stops against the inside of the power vent shell.

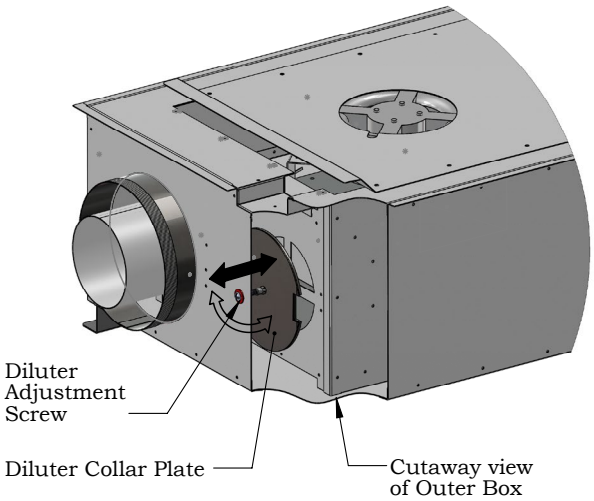


Figure1. Section 4 *Diluter Operation*

Step 3. Turn your fireplace on.

Likely this diluter collar will be too open to engage the air proving switch.

Step 4. Turn the diluter collar screw slowly counter clockwise until the air proving switch is activated.

The diluter collar is now set to the minimum adjustment to allow the fireplace to operate.

If you have wind issues, or if the fireplace goes out from time-to-time, close the diluter collar more to allow a higher air proving switch signal.

Service

Power Vent Wiring

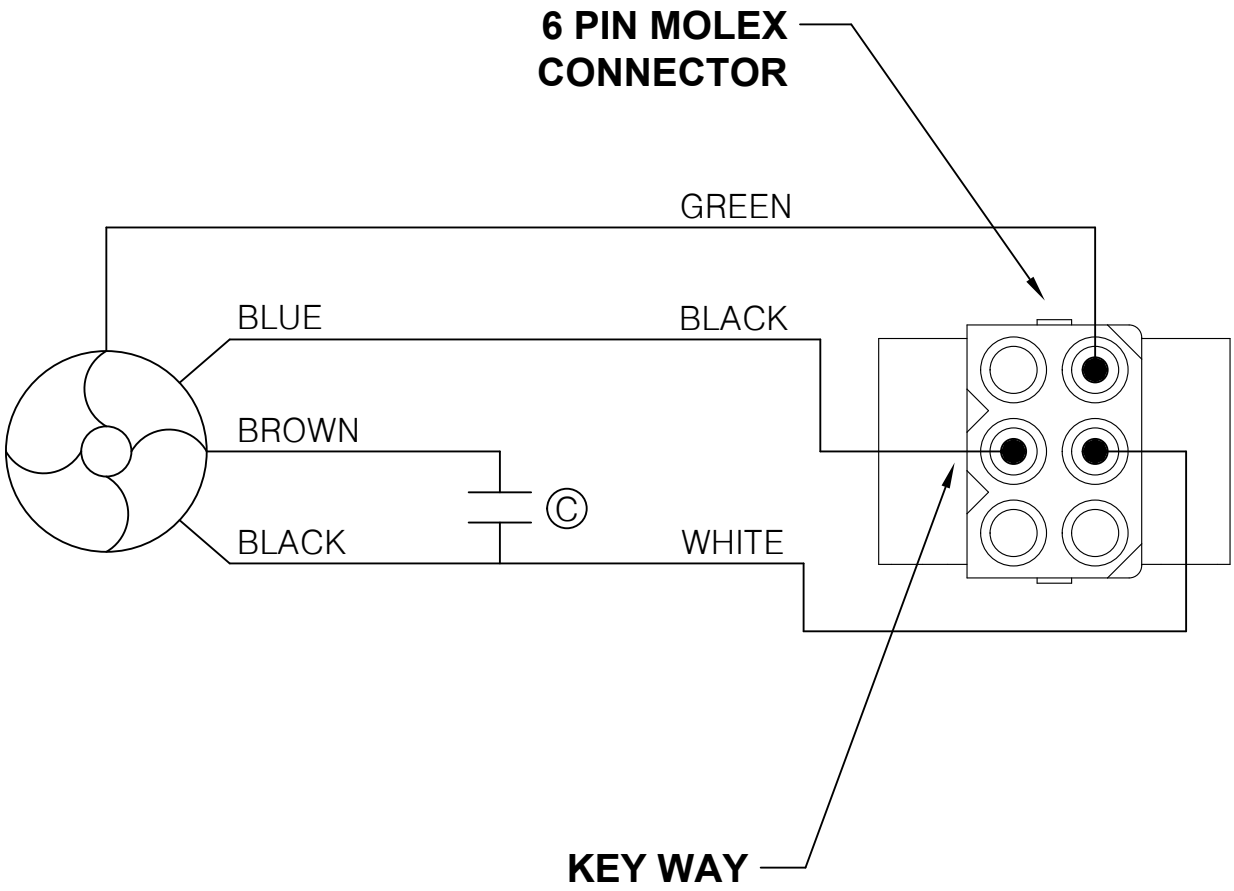


Figure 1 Section 5. *Power Vent Wiring*

Installation

Installing the TMHIN58-40 Termination

Termination clearances

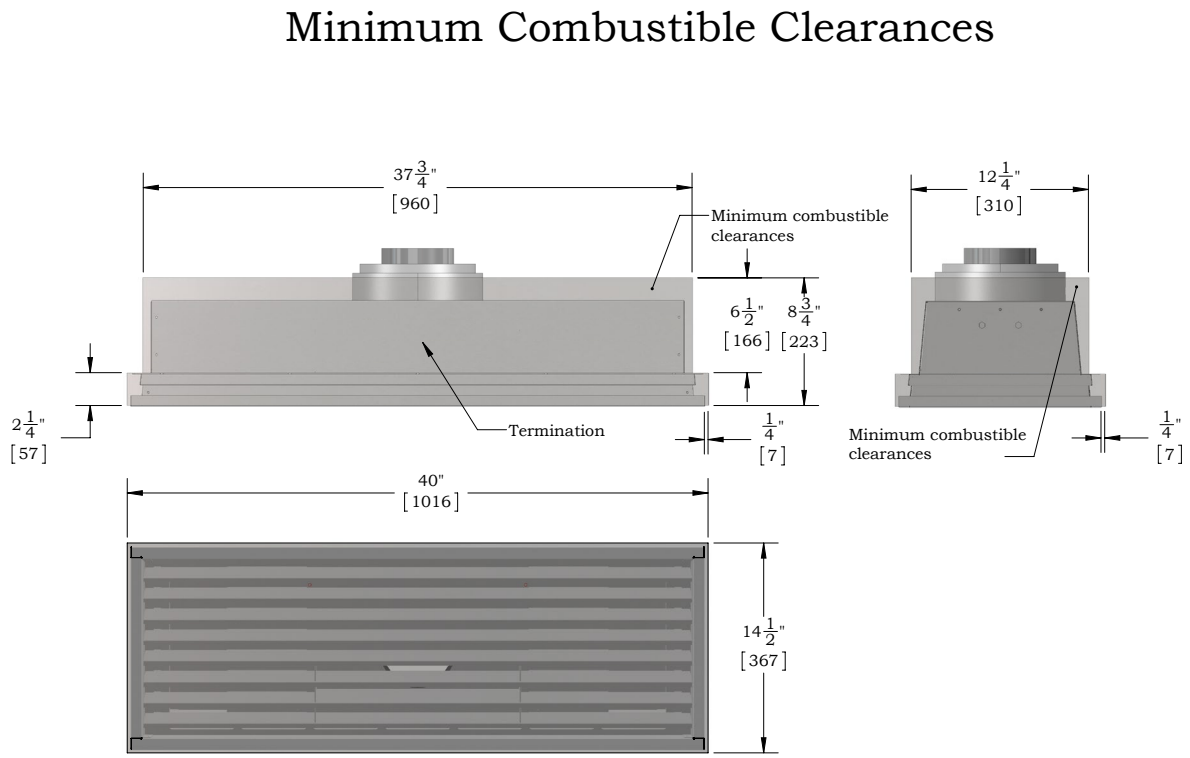


Figure 2 Section 5.

Step 1. Unpackaging the termination.

Figure 3 Section 5.

Installation

Step 2. If doing a concrete install, the termination has two adjustable mounting feet on the sides of the termination.

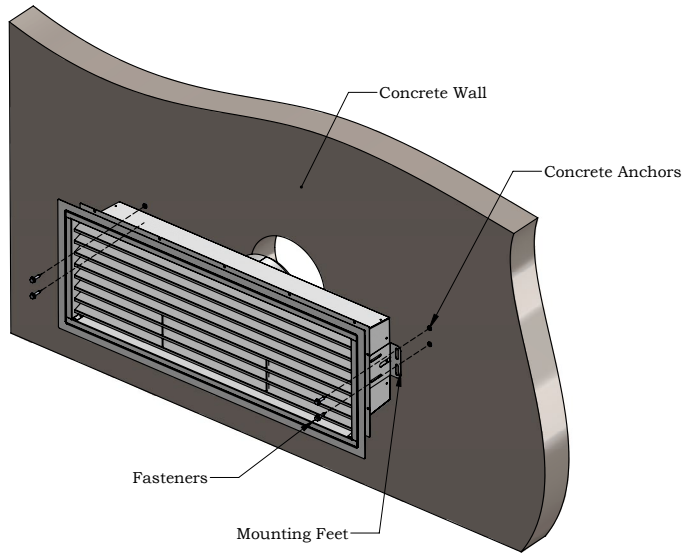


Figure 4 Section 5.

Step 3. If doing a combustible frame install, remove the concrete mounting feet and install as shown in **Figure 5 Section 5**.

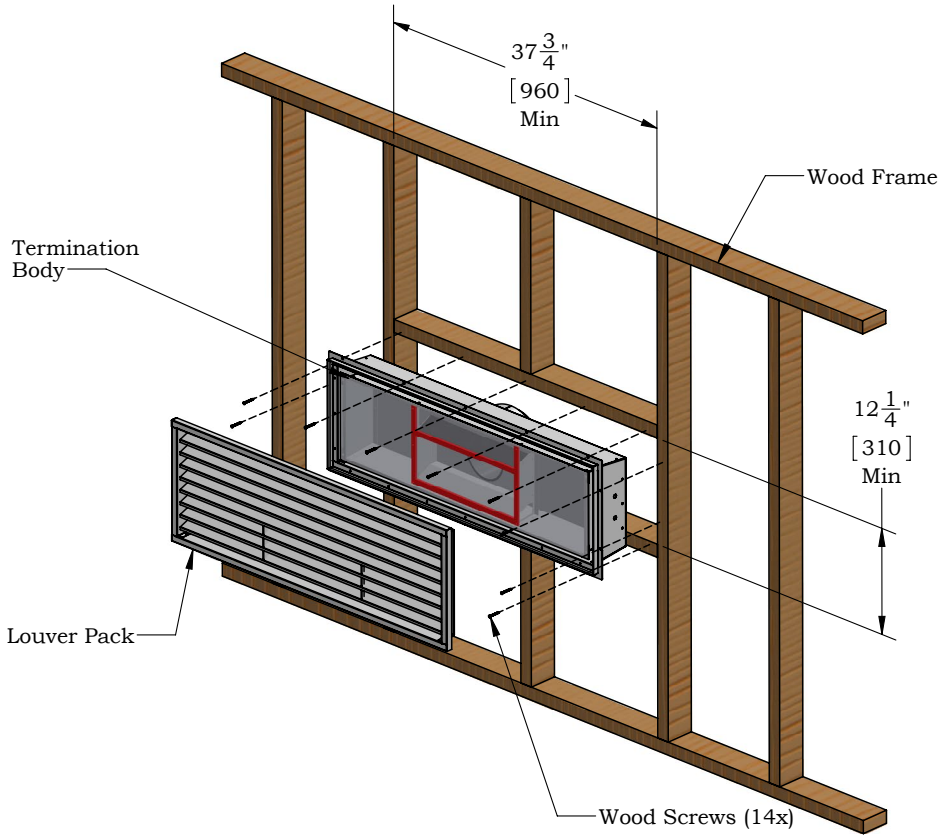


Figure 5 Section 5.

Installation

Step 4. Vanity ring install.

There is an optional vanity ring to cover the unfinished edges of rock facing on the exterior wall around the termination. First, remove the door.

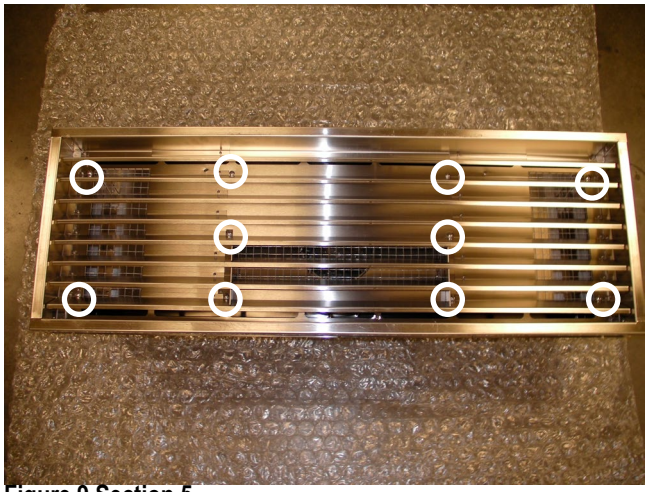


Figure 9 Section 5.

Step 5. To install, place vanity ring around door until vanity ring is flush with surface of door.

Figure 6 Section 5.

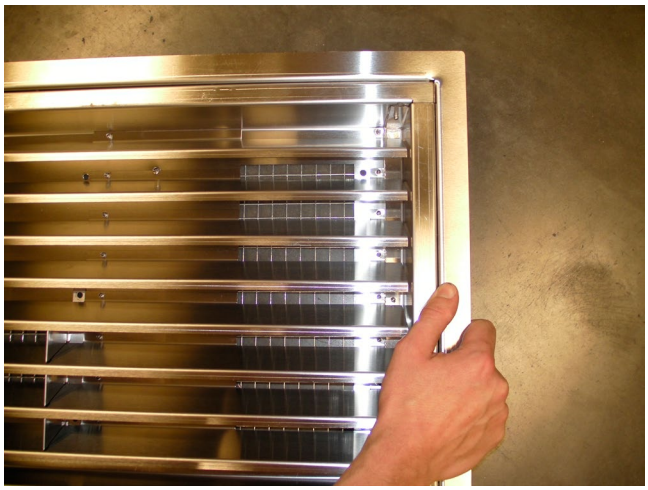


Figure 7 Section 5.

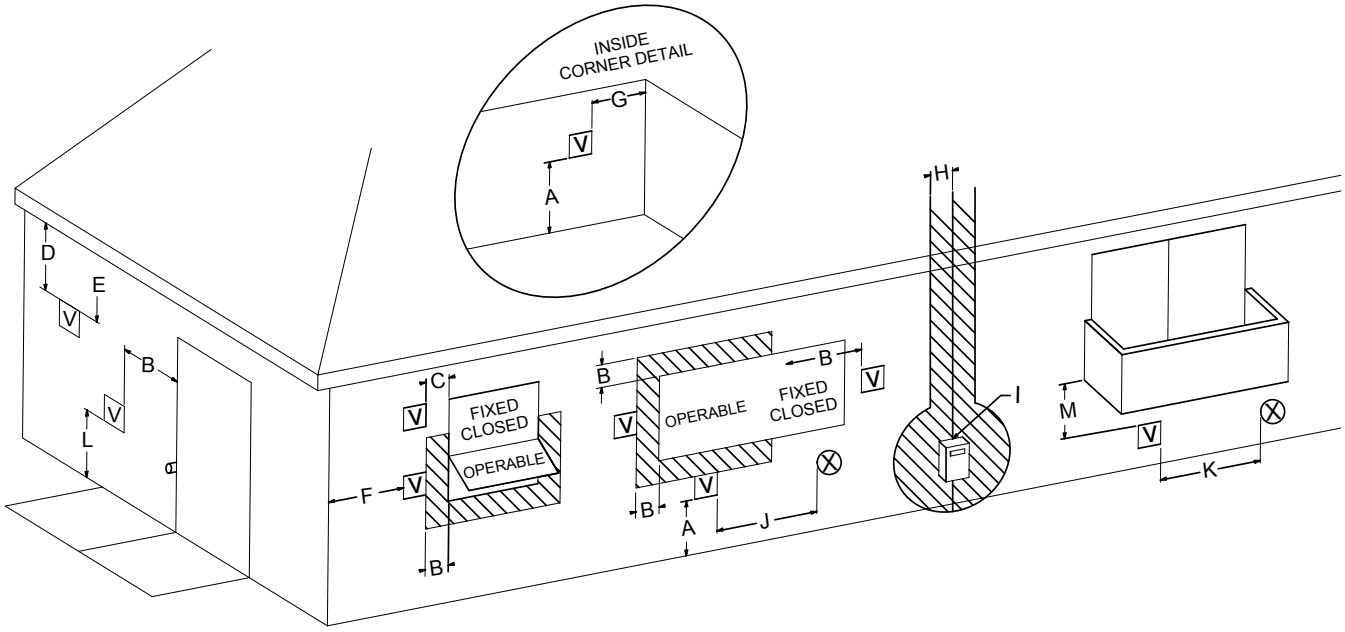
Step 6. Clamp ring in place and drill out holes around the perimeter of door.

Figure 8 Section 5.

Step 7. Secure vanity ring with stainless steel screws or rivets. Apply silicone over top of screws or rivets to prevent leaks.

Step 8. Reinstall the door.

Introduction



V VENTER TERMINAL X AIR SUPPLY INLET AREA WHERE TERMINAL IS NOT PERMITTED

	Canadian Installations[1]	US Installations[2]
A= Clearance above grade, veranda, porch, deck, or balcony	12 in (30 cm)	12 in (30 cm)
B= Clearance to window or door that may be opened	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 9 in (23 cm) for appliances > 10,000 Btuh (3 kW) and < 50,000 Btuh (15 kW), 12 in (30 cm) for appliances ≥ 50,000 Btuh (15 kW)
C= Clearance to permently closed window	B	B
D= Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal	See Fireplace Installation Guide	
E= Clearance to unventilated soffit	See Fireplace Installation Guide	
F= Clearance to outside corner	*	*
G= Clearance to inside corner	See Fireplace Installation Guide	
H= Clearance to each side of center line extended above meter/regulator assembly	3 ft (91 cm) within a height 15 ft. (4.5 m) above the meter/ regulator assembly	*
I= Clearance to service regulator vent outlet	3 ft (91 cm)	*

	Canadian Installations[1]	US Installations[2]
J= Clearance to nonmechanical air supply inlet to building or the combustion air inlet to any other appliance	6in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW)	6in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 9 in (23 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 50,000 Btuh (15 kW), 12 in (30 cm) for appliances > 50,000 Btuh (15 kW)
K= Clearance to a mechanical air supply inlet	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally
L= Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) †	*
M= Clearance under veranda porch deck, or balcony	12 in (30 cm) ‡	*

1 In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code
2 In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code
† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.
‡ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.
* For clearances not specified in ANSI Z223.1/NFPA or CSA B149.1, one of the following shall be indicated
a) A minimum clearance value determined by testing in accordance with section 2.23.5, or;
b) A reference to the following footnote:
"Clearance in accordance with local installation codes and the requirements of the gas supplier"

Figure 10 Section 5.

Capacitor Replacement - REC 1257

REC 1257 Note: Maintenance must be preformed by a qualified and certified person. Turn off the power and gas to fireplace.

Figure 1. Section 6

Step 1. Remove screws securing blower cover.

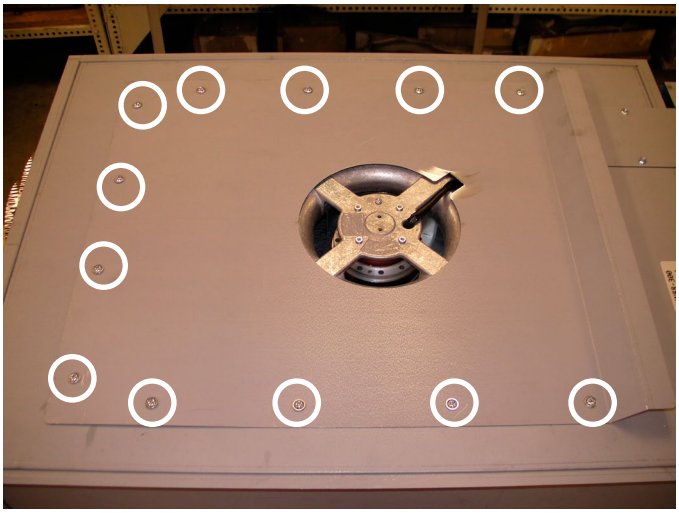


Figure 2. Section 6

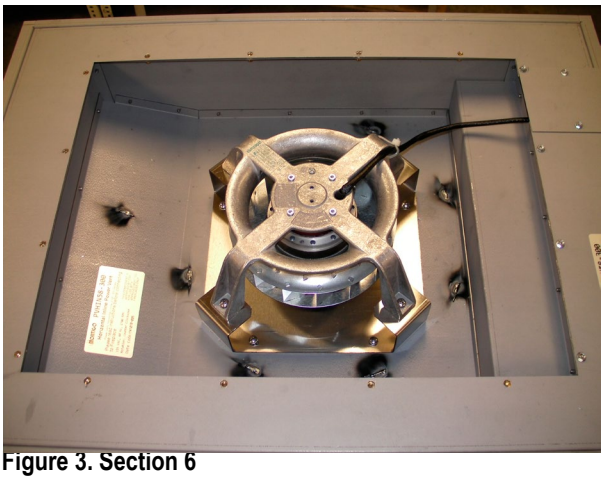


Figure 3. Section 6

Step 2. Remove screws securing component cover.

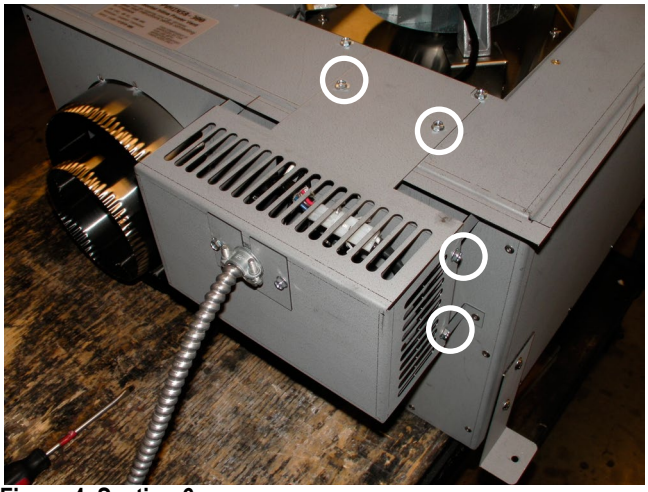


Figure 4. Section 6

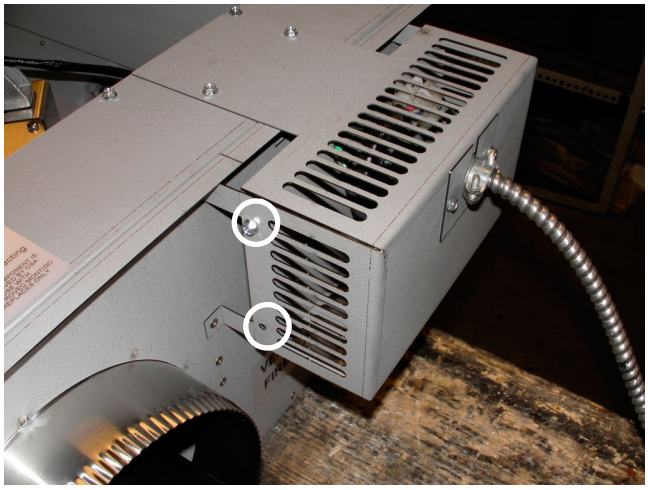


Figure 5. Section 6

Service

Step 3. Cut zap strap securing wires together in bundle.

Figure 6. Section 6

Step 4. Cut off large bell connector connecting white fibre wire from power cable, black wire from blower and one black wire from capacitor. Cut as little as possible, there is not much space.

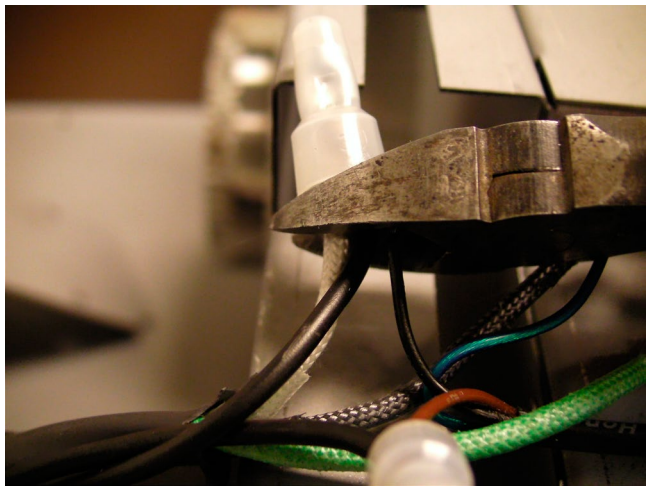


Figure 7. Section 6

Step 5. Cut off small bell connector connecting brown wire from blower and the other black wire from capacitor.

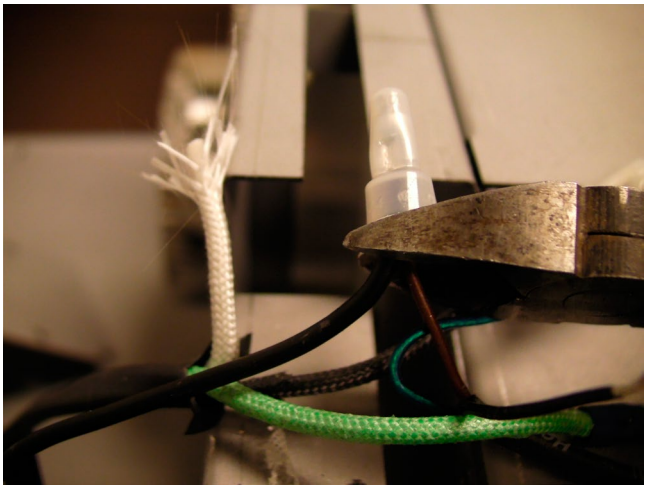


Figure 8. Section 6

Step 6. Unscrew old capacitor and discard. Secure new capacitor in its place.

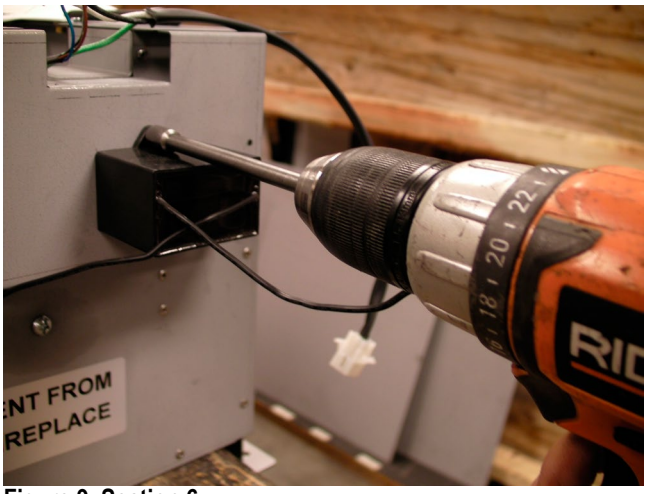


Figure 9. Section 6

Service

Step 7. Strip about 3/8" to 1/2" off all wire that was cut.

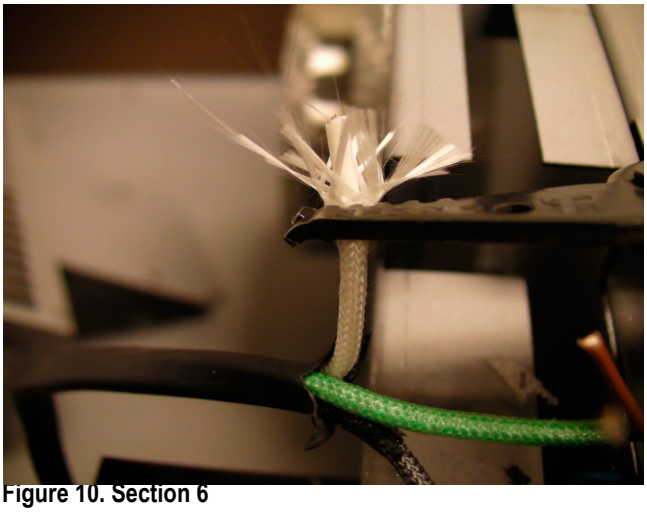


Figure 10. Section 6

Step 8. Twist brown wire from blower together with the other black wire from capacitor. Using small bell connector supplied, crimp wires together.

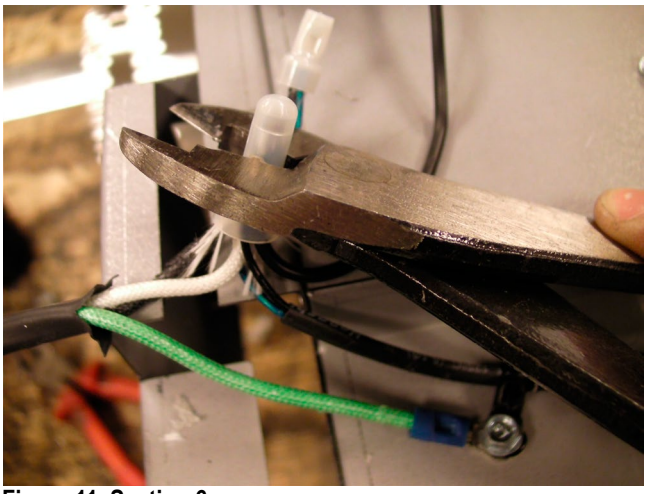


Figure 11. Section 6

Step 9. Twist white fibre wire from power cord together with black wire from blower and one black wire from capacitor. Using large bell connector sup-

Figure 12. Section 6

Step 10. Using suppied zap strap, secure wire bundles together.

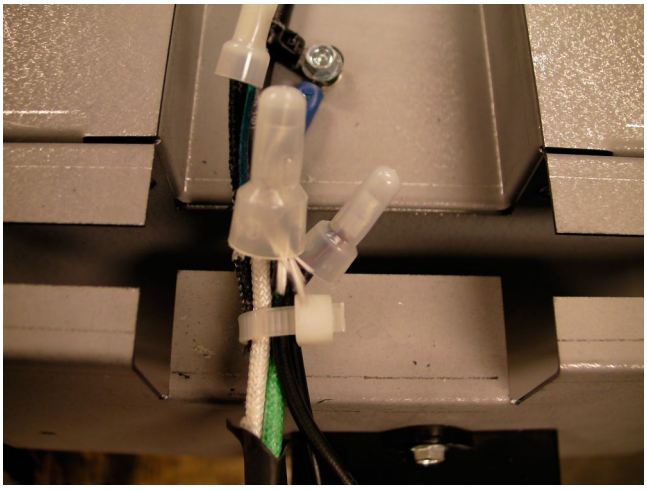


Figure 13. Section 6

Service

Step 11. Reinstall component cover.

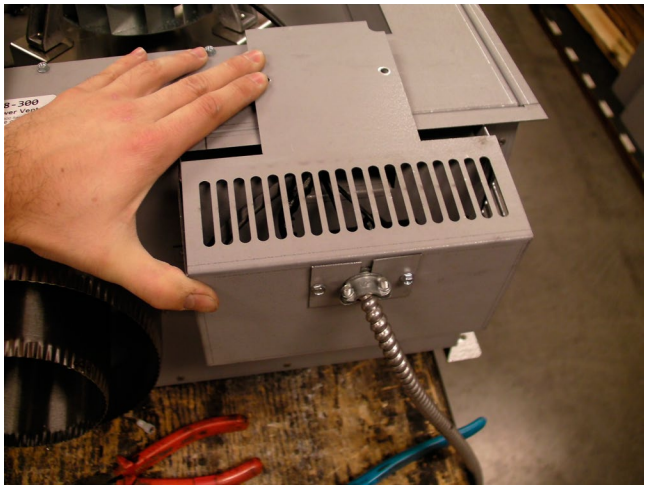


Figure 14. Section 6

Step 12. Reinstall blower cover.

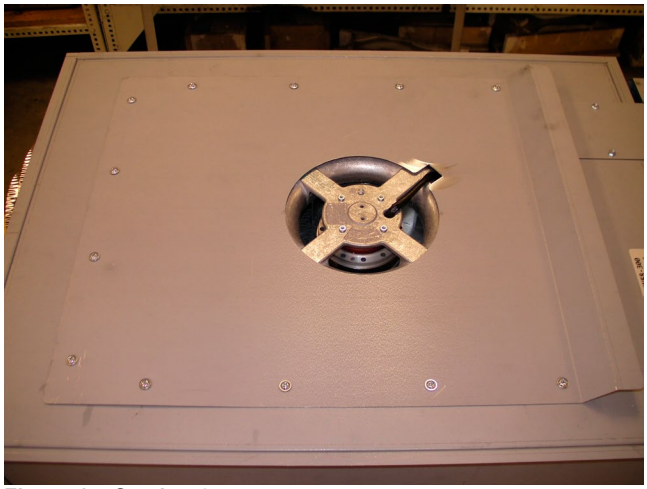


Figure 15. Section 6

Step 13. Turn power back on and check blower rotation is counter clockwise.

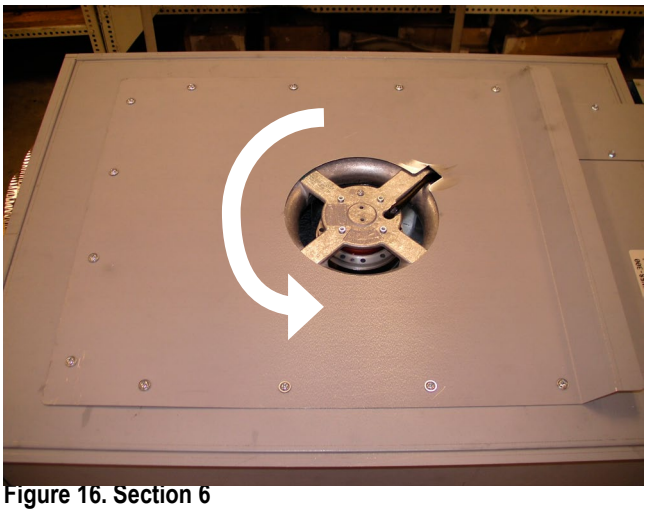


Figure 16. Section 6

Service

Motor and Capacitor Replacement - REC 1258

REC 1258 Note: Maintenance must be preformed by qualified personnel/ electrician. Turn off the gas / power.

Figure 1. Section 7

Step 1. Remove screws securing blower cover.

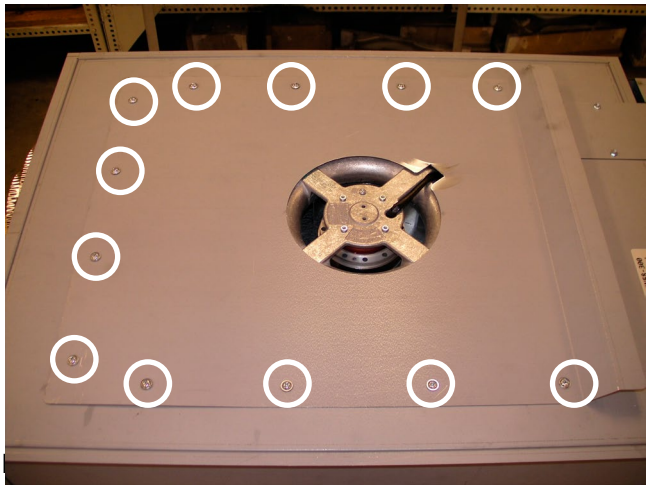


Figure 2. Section 7

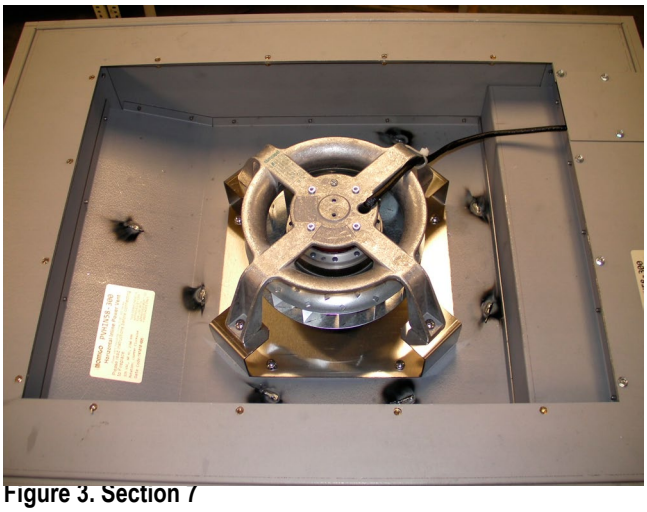


Figure 3. Section 7

Step 2. Remove screws securing component cover.

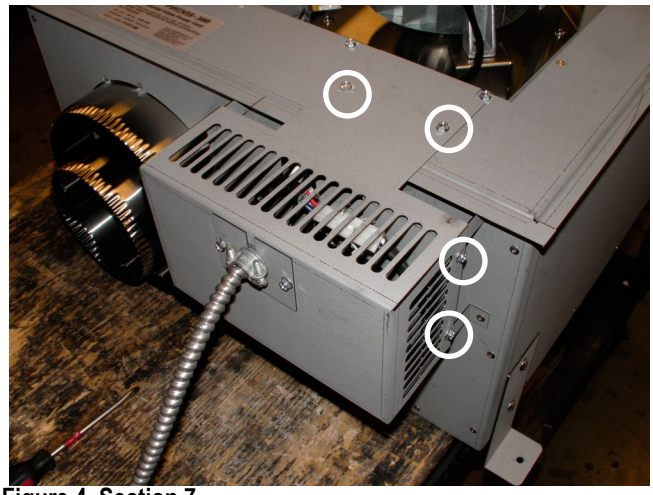


Figure 4. Section 7

Figure 5. Section 7

Service

Step 3. Unplug capacitor / blower assembly from power vent power cable.

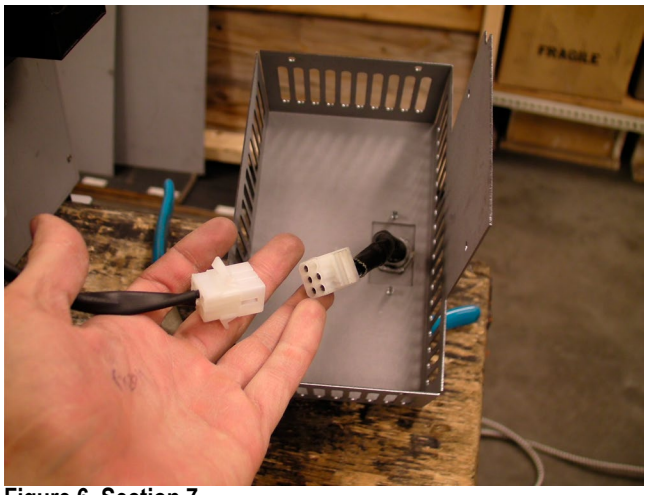


Figure 6. Section 7

Step 4. Unscrew black zap strap anchor / ground wire.

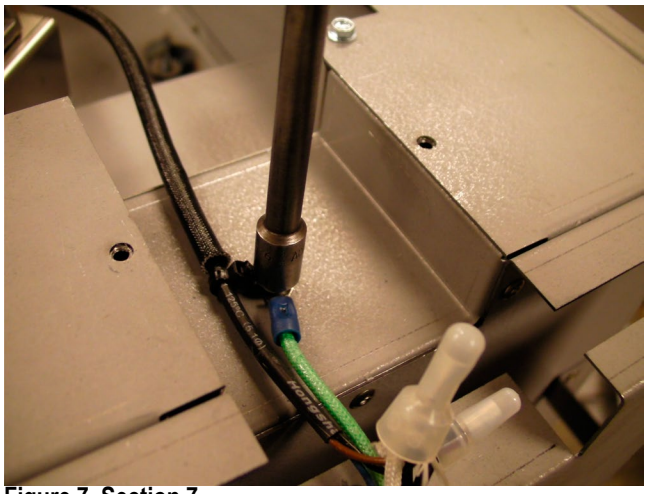


Figure 7. Section 7

Step 5. Unscrew capacitor from mounting point.

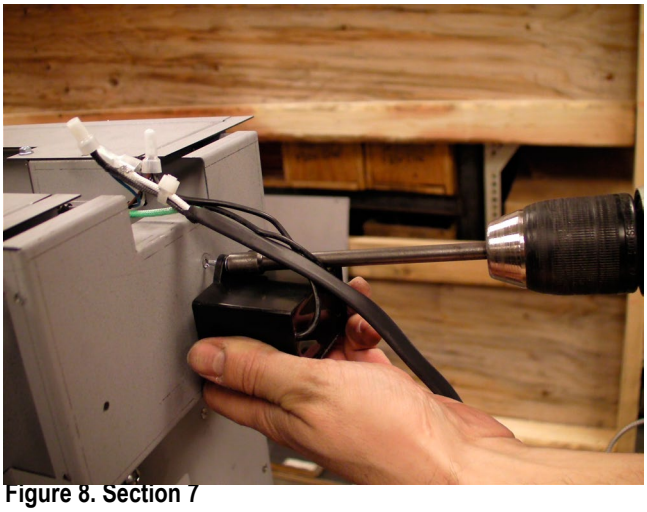


Figure 8. Section 7

Step 6. Unscrew blower from power vent.

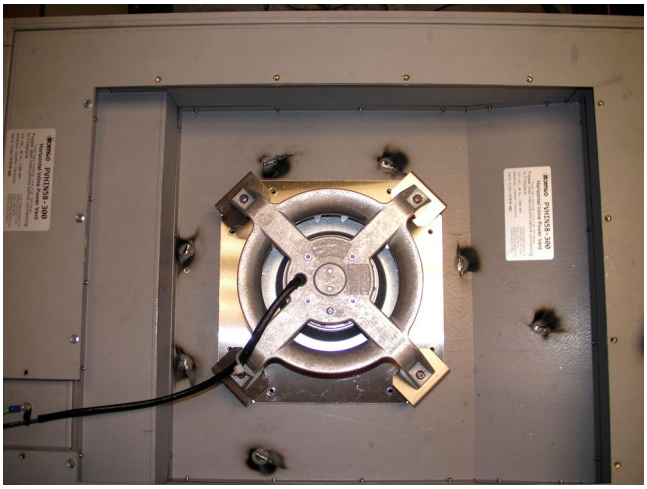


Figure 9. Section 7

Step 7. Remove capacitor / blower assembly and discard.

**If under warranty, contact Montigo to return for credit.*

Step 8. Secure blower to Power Vent using supplied screws and star washers. Make sure wire is close to component mounting box.

Figure 10. Section 7

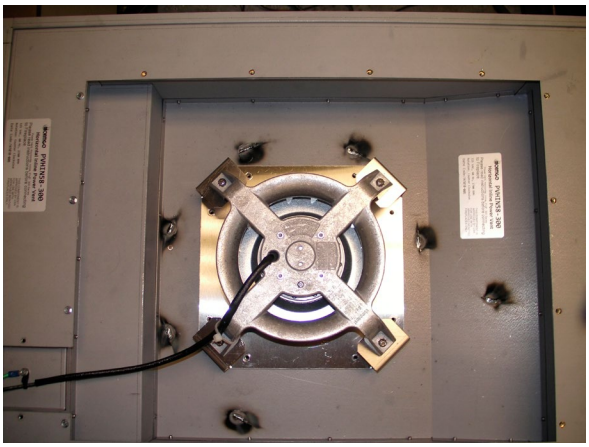


Figure 11. Section 7

Step 9. *Secure capacitor component mounting bracket.*

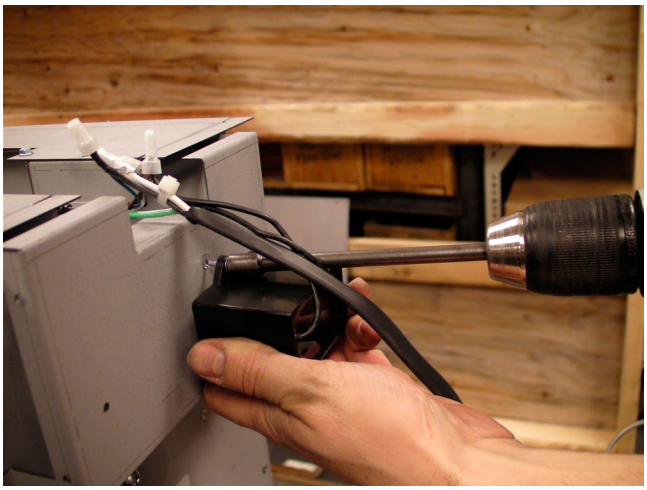


Figure 12. Section 7

Step 10. *Secure wires and ground screw to Power Vent using supplied black zap strap anchor.*

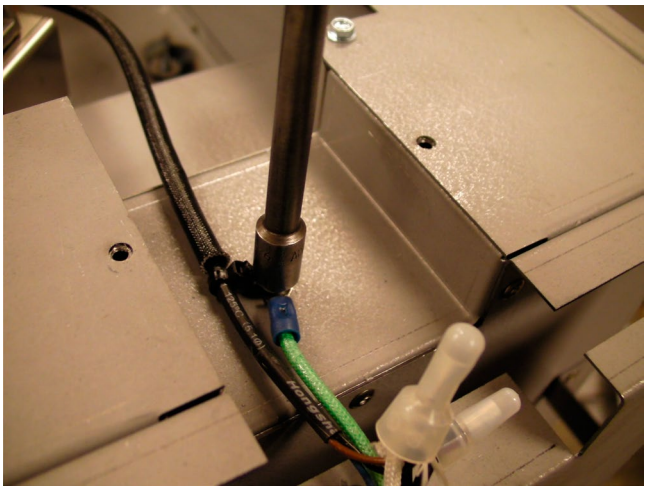


Figure 13. Section 7

Service

Step 11. Plug capacitor / blower assembly into Power Vent power cord.

Figure 14. Section 7

Step 12. Reinstall component cover.

Figure 15. Section 7

Step 13. Reinstall blower cover.

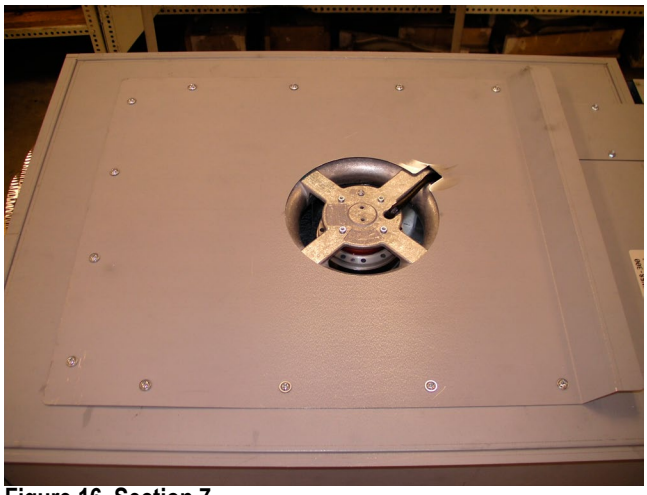


Figure 16. Section 7

Step 14. Turn on power.

Step 15. Check blower rotation is counter clockwise.

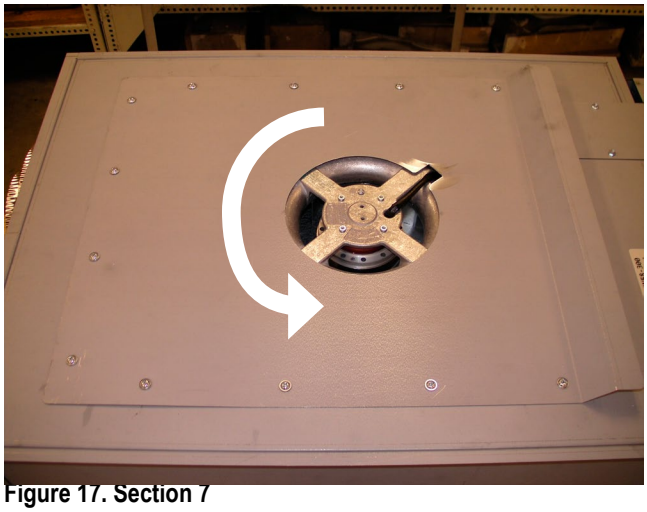


Figure 17. Section 7

Appendix

Appendix A: Warranty

The Warranty

The Companies warrants the Montigo Gas Appliance to be free from defects in materials and workmanship at the time of manufacture. On the Montigo fireplace, there is a ten-year warranty on the firebox and its components, a five-year warranty on the main burner and pilot burner, and a one-year warranty on the gas control valve, fibre logs and Power Vent Module. The Glass, plated / painted finishes, and refractory lining are exempt from the warranty.

Remedy And Exclusions

The coverage of this Warranty is limited to all components of the Gas Appliance manufactured by The Companies.

This Warranty only covers Montigo Gas Appliances installed in the United States or Canada.

If the components of the Gas Appliance covered by this Warranty are found to be defective within the time frame stated (see The Companies right of investigation outlined below). The Companies will, at its option, replace or repair defective components of the Gas Appliance manufactured by The Companies at no charge, and will also pay for reasonable labour costs incurred in replacing or repairing components. If repair or replacement is not commercially practical, The Companies will, at its option, refund the purchase price of the Montigo Gas Appliance.

This Warranty covers only parts and labour as provided above. In no case shall The Companies be responsible for materials, components, or construction which are not manufactured or supplied by The Companies, or for the labour necessary to install, repair or remove such materials, components or construction. All replacement or repair components will be shipped F.O.B. the nearest The Companies factory.

Qualifications To The Warranty

The Gas Appliance Warranty outlined above is further subject to the following qualifications:

(1) The Gas Appliance must be installed in accordance with The Companies installation instructions and local building codes. The Warranty on this Montigo Gas Appliance covers only the component parts manufactured by The Companies. The use of components manufactured by others with this Montigo Gas Appliance could create serious safety hazards, may result in the denial of certification by recognized national safety agencies, and could be in violation of local building codes. This warranty does not cover any damages occurring from the use of any components not manufactured or supplied by The Companies

(2) The Montigo Gas Appliance must be subjected to normal use. The Gas Appliances are designed to burn gas only. Burning conventional fireplace fuels such as wood, coal or any other solid fuel will cause damage to the Gas Appliance, will produce excessive temperatures and will result in a fire hazard.

Limitations On Liability

It is expressly agreed and understood that The Companies sole obligation, and purchaser's exclusive remedy under this Warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above.

In no event shall The Companies be responsible for any incidental or consequential damages caused by defects in its products, whether such damage occurs or is discovered before or after replacement or repair, and whether or not such damage is caused by The Companies negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. The duration of any implied warranty with respect to this Montigo Gas Appliance is limited to the duration of the foregoing warranty. Some states do not allow limitation on how long an implied warranty lasts, so the above may not apply to you.

Investigation Of Claims Against Warranty

The Companies reserves the right to investigate any and all claims against this Warranty and to decide upon method of settlement.

The Companies Are Not Responsible For Work Done Without Written Consent

The Companies shall in no event be responsible for any warranty work done without first obtaining The Companies written consent.

Dealers Have No Authority To Alter This Warranty

The Companies employees and dealers have no authority to make any warranties nor to authorize any remedies in addition to or inconsistent with those stated above.

How To Register A Claim Against Warranty

In order for any claim under this Warranty to be valid, The Companies must be notified of the claimed defect in writing or by telephone, as soon as reasonably possible after the defect is discovered. Claims against this Warranty in writing should include the date of installation, and a description of the defect.

Other Rights

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

NOTE: *The Companies* as stated above refer to - Canadian Heating Products Inc. and/or Montigo Del Ray Corp.

Canadian Heating Products Inc. and/or Montigo DelRay Corp. reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products.

Appendix

Appendix B: State of Massachusetts

Amendment

(Gas Fireplace / Equipment sold in the State of Massachusetts)
5.08: Modifications to NFPA-54, Chapter 10

(1) Revise NFPA-54 section 10.5.4.2 by adding a second exception as follows:
Existing chimneys shall be permitted to have their use continued when a gas conversion burner is installed, and shall be equipped with a manually reset device that will automatically shut off the gas to the burner in the event of a sustained back-draft.

(2) Revise 10.8.3 by adding the following additional requirements:
(a) For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.
(b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

1. The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

(c) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM PROVIDED. When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:
1. Detailed instructions for the installation of the venting system design or the venting system components; and
2. A complete parts list for the venting system design or venting system.

(d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:
1. The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.
(e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

(3) After NFPA-54 section 10.10.4.2 add a new section 10.10.4.3 as follows:
When more than four gas appliances are to be vented through a common gas vent or common horizontal vent manifold, a plan of the proposed vent installation shall be submitted to the Inspector and the serving gas supplier for review and approval.

Extraction from: Massachusetts Rules and Regulations
5.00: Amendments To 2002 Edition Of ANSI Z223.1-NFPA-54

MONTIGO®
the art of fireplaces

PVHIN58-300
with TMHIN58-40

XG0521 -111214